From: Rene Fuentes
To: Sheila Fleming

Cc: Jennifer MacDonald; Eric Winiecki; Marie Jennings; Michael Boykin

Subject: Re: Happy Cows Project Unhappy update-- Well DC-09

Date: 12/14/2012 09:01 AM

Group,

We have just had a delay. Well DC-09 has gone down to 155 feet, which is all the casing we had available at the site, and we have **NOT hit any water**. We are waiting to see how much further they are willing to drill with the present casing size (which they are going to pick up today together with some 8 inch casing which we were going to need for DC-1). It is not clear why we are not finding water in the sand box, since based on DC-14 should have been at less than 130 feet (I originally estimated 100 feet to water here based on that -- so much for being the ones who break ground on getting the original data for the area).

Not sure where we are going now, but everyone is contacting the next level up to make decisions that are getting harder. Worst case would be to have to abandon this well and move over to start with 8 inch casing to minimize the friction on the smaller casing as we go deeper. We are hoping to be able to drill "a few more feet" with the 6 inch casing we are using now and doing some serious hoping to hit the water table.

We called Mike B. and he is aware of the issues as of 830 am. I am still assuming that this is a fairly critical well.

Also note that we have NOT found shallow perched water in any of the drill sites. And in general all the drilling has been in very nice sand and in a few cases gravels. What does not make much sense is the water level pattern in this well which was my hope to have more consistency with DC-14 so we could plan for DC-01.

One more major issue has just developed-- due to this setback we are running into the holidays and the drillers would not work past Dec 21st at mid day. This raises the question of how may wells we want to do if we want to not remobilize the drilling equipment a second time after the holidays. My suggestion is that we reconsider wells DC-5, DC-6, and DC-8, and possibly drop them given the new depth problem. If we can get moving again by tomorrow and get this well done we would have DC-01, HK-10, HK-11, and HK-12 left as the first priority wells in the next few days before the holidays, which may be doable.

Please discuss this and let us know your group opinion. We are relocating back to Zillah wastewater treatment plant now due to lack of equipment at this moment. We are about to leave DC-09 in a few minutes, but we can talk or have more emails when we get resettled in Zillah.

René

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